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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,797	11/29/2000	Larry L. Kinn	34423/199915	9578

826 7590 09/20/2002

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EXAMINER

PIERCE, JEREMY R

ART UNIT PAPER NUMBER

1771

DATE MAILED: 09/20/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

AS-3

<b>Office Action Summary</b>	Application No. 09/725,797	Applicant(s) KINN ET AL.	
	Examiner Jeremy R. Pierce	Art Unit 1771	

-- **Th MAILING DATE of this communication app ars on the cov r sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2000 .
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 13,19,29 and 30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1-11,14-17 and 20-28 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
    If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
        1. ☐ Certified copies of the priority documents have been received.  
        2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
    \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
    a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-28, drawn to a nonwoven web, classified in class 442, subclass 361.
- II. Claims 29-30, drawn to a filter, classified in class 210, subclass 348.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a surgical drape and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. This application contains claims directed to the following patentably distinct species of the claimed invention: the hydrophilic melt additive can be selected from the group consisting of monomer or dimer fatty acid having a carbon chain length in the range of 6 to 50; hydroxy phenols and polyethylene glycol; polyvinyl alcohol; and polyvinyl formal.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-7, 9-11, 14-17, and 20-28 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. During a telephone conversation with Raymond Linker on September 16, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-28. Furthermore, an election of species was made to prosecute the invention comprising a hydrophilic melt additive of hydroxy phenols and polyethylene glycol. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13, 19, and 29-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 7-11, 14, 15, 17, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Hansen et al. (U.S. Patent No. 5,456,982).

Hansen et al. teach a thermobondable, hydrophilic bicomponent fiber for use in the blending of fluff pulp (column 1, lines 9-11). The fibers have an outer sheath and an outer sheath comprising polyolefin that is made hydrophilic by the addition of a surface-active agent and an inner core comprising a polyolefin or polyester (column 2, lines 57-67). With regard to claims 4 and 5, the sheath component may comprise polypropylene or polyethylene (column 3, lines 45-48). With regard to claim 7, Hansen et al. describe manufacturing the nonwoven fabric in a wet-laid process (column 9, lines 16-21). With regard to claim 8, Hansen et al. disclose using a wetting agent based on polyethylene glycol (column 4, line 59). With regard to claim 9, Hansen et al. disclose the core may comprise polypropylene (column 3, line 39). With regard to claims 10 and 11, polyethylene and polypropylene can make up the sheath when the core is made from polypropylene (column 3, lines 32-42). With regard to claim 14, the weight ratio of the sheath to the core can be up to 90:10 (column 5, lines 28-29). With regard to claim 15, the thermal point bonds of the bicomponent fibers are spaced apart from one another (column 11, lines 6-19). With regard to claim 17, the fibers are spun into a bundle of bicomponent filaments (column 6, lines 50-52). This would create a spunbonded web, because "web" does not define a definite structure, so any case where filaments were spun and bonded to one another would technically create a spunbonded web. With regard to claims 26-28, the bicomponent fibers are useful in hygiene absorbent products such as diapers, sanitary napkins, and adult incontinence products (column 8, lines 49-54).

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***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5, 7, 9-11, 14, 15, 17, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeo et al. (U.S. Patent No. 5,643,662) in view of Hansen et al.

Yeo et al. disclose a sheath-core fiber where the core material is hydrophobic and the sheath material is hydrophilic (column 2, lines 46-67). Yeo et al. disclose the core can be specifically made from polypropylene (column 2, line 65). However, Yeo et al. disclose the sheath material to be made from hydrophilic polymer and not made from modified polyolefin. Hansen et al. disclose a method of making a sheath-core fiber where the sheath can be made out of polyolefin, such as polyethylene or polypropylene, and be modified so that it is hydrophilic. It would have been obvious to one having ordinary skill in the art to use the hydrophilic polyolefin of Hansen et al. in the sheath of Yeo et al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to claims 7 and 17, Yeo et al. make the nonwoven material by spunbonding (column 3, lines 17-32). With regard to claim 14, Yeo et al. teach the sheath component comprises up to 50% of the fiber (column 3, line 24). With regard to claim 15, the web is thermally point bonded

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(column 5, lines 52-53). With regard to claims 23-25, the web is combined with another web layer and a film layer (columns 7-8, lines 62-5). With regard to claims 26-28, Yeo et al. disclose the material is used to make absorbent articles such as diapers and sanitary napkins (column 1, lines 26-30).

10. Claims 6 and 20-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. in view of Graef et al. (U.S. Patent No. 5,437,418).

Hansen et al. do not teach incorporating non-wettable fiber formed of a polyethylene sheath and a polypropylene core into the nonwoven material. It is common practice in the art of absorbent products to incorporate these types of fibers into nonwovens to increase bonding strength in the web. Graef et al. discloses the addition of such fibers to cellulose fibers in a nonwoven material in order to help bond the nonwoven (column 5, lines 16-43). Hansen et al. use all wettable fibers as binding fibers rather than use some fibers that are not wettable. However, it would have been obvious to one having ordinary skill in the art to incorporate non-wettable sheath-core fibers into the nonwoven of Hansen et al. in order to maintain the desired bond strength in the nonwoven web at the expense of losing some hydrophilicity in the nonwoven web. Motivation to do so would be in saving the cost of using additional wetting agent to make all fibers hydrophilic. With regard to claim 21, it would have been obvious to a person having ordinary skill in the art to use non-wettable fibers with a smaller denier than the wettable fibers in order to maintain a higher hydrophilicity. With regard to claim 22, it would have been obvious to a person having ordinary skill in the art to incorporate between 10 and 90 percent by weight of non-wettable fibers and between 10 and 90



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percent by weight of wettable fibers in the web, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

11. Claims 7, 16, 17, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. in view of Schleinz et al. (U.S. Patent No. 5,458,590).

Hansen et al. do not disclose the multitude of methods that are used in creating a nonwoven material useful in a sanitary napkin or diaper. Schleinz et al. teach that in the art of absorbent products, nonwoven fabrics can be continuous spunbonded or meltblown webs, or staple fiber carded, air laid, or wet laid webs (column 7, lines 18-45). It would have been obvious to one having ordinary skill in the art to make the nonwoven web provided in Hansen et al. by any of the known processes in absorbent product making as a matter of selecting a known process to obtain the desired properties of the finished product. With regard to claims 23 and 25, Hansen et al. do not specifically disclose what other layers might be present when the nonwoven web is used in an absorbent product. Schleinz et al. teach that absorbent products typically comprise multiple layers of film and other woven and nonwoven fabrics (column 8, lines 1-9). It would have been obvious to one having ordinary skill in the art to incorporate another layer of film or nonwoven fabric into the nonwoven material described by Hansen et al. in order to make a useful absorbent product as taught by Schleinz et al.

#### ***Allowable Subject Matter***

12. Claim 18 is allowed.

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13. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose the use of hydroxy phenols and polyethylene glycols in a mixture as a wetting agent for hydrophobic polyolefin fiber.

### ***Conclusion***


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: JP 05-106,116 to Koshiji et al. (English translation provided).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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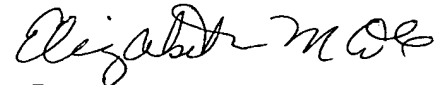
A handwritten signature in black ink, appearing to read "Jeremy R. Pierce". The signature is fluid and cursive, with the first name "Jeremy" being more prominent.

Jeremy R. Pierce

Examiner

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September 18, 2002

A handwritten signature in black ink, appearing to read "Elizabeth M. Cole". The signature is cursive and somewhat stylized, with the last name "Cole" being more prominent.

ELIZABETH M. COLE  
PRIMARY EXAMINER